

2005 MP Index

A Guide to MP Volume 44

2005 Subject Index

CONCRETE

- Case History: Corrosion and Cathodic Protection of Prestressed Concrete Cylinder Pipe, 5-32
- Concrete Surface Preparation Using a Gelled Acid, 11-24
- Control of Water Migration Through Concrete Using Electro-osmosis, 7-42

CORROSION BASICS

- Cathodic Protection Principles, 6-68
- Corrosion Potential, 8-66
- Environmental Cracking, 7-58
- Hydrogen Damage, 12-64
- Importance of Coating Thickness, 5-62
- Marine Corrosion, 10-54
- Potentials and Galvanic Effects, 9-62
- Protective Coating Repairs, 2-60
- Stainless Steels, 4-58
- Why Metals Corrode, 3-52
- Zn, Zn Alloys, and Zn Coatings, 1-62

FEATURE ARTICLES (VARIOUS SUBJECTS)

- 1,600 Years Young, 7-16
- A Different Kind of Third-Party Damage, 1-16
- CDU Overhead Corrosion: A NACE Solution, 4-16
- CORROSION/2005 Program Preview, 3-59
- CORROSION/2005 Recap, 7-20
- CORROSION/2006 Advance Program, 10-A1
- Corrosion Costs and Maintenance Strategies—A Civil/Industrial and Government Partnership, 9-16
- Education Supplement: Universities and Colleges Offering Corrosion Studies, 11-59
- How to Get Published in 2006 MP, 11-18
- Keeping Cleanrooms Clean, 5-16
- New Remote Monitoring Link Takes to the Skies, 5-18
- The Case for Composites, 8-16
- U.S. Average Salary Surpasses Benchmark, 1-16

GAS

See OIL AND GAS PRODUCTION

INHIBITORS

See CHEMICAL TREATMENT

INSPECTION & INSTRUMENTATION

- Case History: Deaerator Inspection: What to Look For, 7-52
- Development of a Regulatory Framework for Material Selection, Corrosion Management, and Pipeline Integrity Monitoring, 3-44
- Electromagnetic Inspection of Wire Ropes and Strands on Guyed and Supported Structures, 2-48

- Magnetic Flux Leakage Device for Offshore Oil Pipeline Defect Inspection, 10-48
- New Remote Monitoring Link Takes to the Skies, 5-18
- Online Monitoring of Undercoating Corrosion Using Coupled Multielectrode Sensors, 3-28
- Phorgotten Phenomena: Real-Time Linear Polarization Corrosion Measurements, 5-48
- Phorgotten Phenomena: The Importance of Regular Potentiostat Calibration, 3-22
- Pipeline Integrity Assessment and Management, 1-18

LOCALIZED ATTACK

See MICROBIAL ATTACK

MARINE ENVIRONMENTS

See OFFSHORE STRUCTURES;
SEAWATER

MATERIALS SELECTION & DESIGN

- A Computerized Model Incorporating MIC Factors to Assess Corrosion in Pipelines, 1-56
- Case Histories: Fiberglass-Reinforced Plastic Equipment for Waste Incineration Gases, 4-50
- Case History: Deaerator Inspection: What to Look For, 7-52
- Case History: Stress Corrosion Cracking of a Nickel-Lined Steel Flange in Caustic Service, 9-56
- Comparison of Reactive and Refractory Metals in Selected Aqueous Environments, 4-46
- Corrosion of Aboveground Fuel Storage Tanks, 9-44
- Control of Water Migration Through Concrete Using Electro-osmosis, 7-42
- Corrosion Basics: Environmental Cracking, 7-58
- Corrosion Basics: Stainless Steels, 4-58
- Corrosion Basics: Why Metals Corrode, 3-52
- Development of a Regulatory Framework for Material Selection, Corrosion Management, and Pipeline Integrity Monitoring, 3-44
- Electrochemical Noise Corrosion Monitoring in Radioactive Liquid Waste Storage Tanks, 2-52
- Electromagnetic Inspection of Wire Ropes and Strands on Guyed and Supported Structures, 2-48
- Failure Analysis: Failure of an Air Inlet Header of a Secondary Reformer, 12-56
- Failure Analysis: Hydrogen Embrittlement of AISI 4140 Stud Bolts, 9-50
- Failure Analysis of Piping in a Benzene Anhydride Heat Exchanger, 8-46

- Failure Analysis: Investigation of the Failure of a High-Pressure Pump Motor Bearing Oil Cooler, 8-50

- Failure Analysis: Investigation of Severe Corrosion of Aluminum Parts in Stored Diesel Engine Cooling Systems, 8-56
- Failure Analysis: Volatile Fatty Acid-Enhanced Carbon Dioxide Corrosion of a Multiphase Well Fluid Pipeline, 1-52
- Magnetic Flux Leakage Device for Offshore Oil Pipeline Defect Inspection, 10-48
- Microbial Contribution to Blue Water Corrosion, 6-56
- Phorgotten Phenomena: Localized Corrosion of Stainless Steel, 7-48
- Phorgotten Phenomena: Ten Commandments to Prevent Microbiologically Influenced Corrosion in Your System, 11-46
- Stress Corrosion Cracking in Fuel Ethanol: A Recently Recognized Phenomenon, 12-50
- Stress Corrosion Cracking of Carbon Steel in Nuclear Component Cooling Water Systems—Part 1, 5-52
- Stress Corrosion Cracking of Carbon Steel in Nuclear Component Cooling Water Systems—Part 2, 6-46
- The Case for Composites, 8-16

MICROBIAL ATTACK

- A Computerized Model Incorporating MIC Factors to Assess Corrosion in Pipelines, 1-56
- Microbial Contribution to Blue Water Corrosion, 6-56
- Phorgotten Phenomena: Ten Commandments to Prevent Microbiologically Influenced Corrosion in Your System, 11-46

OFFSHORE STRUCTURES

See also SEAWATER

- Case History: Corrosion Problems Associated with a Fireproofing-Coated Structure Exposed to a Marine Environment, 10-34
- Corrosion Basics: Marine Corrosion, 10-54
- The Case for Composites, 8-16

OIL AND GAS PRODUCTION

See also REFINERIES

- Corrosiveness of Acidic Crude Oil and Its Fractions, 4-34
- Failure Analysis: Volatile Fatty Acid-Enhanced Carbon Dioxide Corrosion of a Multiphase Well Fluid Pipeline, 1-52
- Internal Corrosion Monitoring and Control in Sour Gas Systems, 8-36
- The Case for Composites, 8-16

PAINT

See COATINGS

2005 MP Index

A Guide to MP Volume 44 2005 Subject Index

PIPELINES

- A Computerized Model Incorporating MIC Factors to Assess Corrosion in Pipelines, 1-56
- A Different Kind of Third-Party Damage, 1-16
- A Sacrificial Anode Retrofit Program for Existing Cast Iron Distribution Water Mains, 5-20
- Barrier Properties of Two Field Pipeline Coatings, 4-26
- Case Histories: Ductile Iron Pipeline Failures, 5-26
- Case History: Cathodic Protection for a New Ductile Iron Water Transmission Main, 10-20
- Case History: Corrosion and Cathodic Protection of Prestressed Concrete Cylinder Pipe, 5-32
- Case History: Interference Problems and Nonuniform Potentials in Cathodic Protection of a Complex Installation, 12-22
- Corrosion Control Statistical Analysis of Iron Pipe, 1-30
- Corrosion Protection of Ductile Iron Pipe, 1-24
- Development of a Regulatory Framework for Material Selection, Corrosion Management, and Pipeline Integrity Monitoring, 3-44
- Electrical Safety and Cathodic Protection Rectifiers, 6-26
- Epoxy Pipeline Coatings—Fit for Service, 8-30
- Evaluation of In Situ Pipe Coating Process for Mitigation of Lead and Copper in Drinking Water, 5-38
- Failure Analysis of Piping in a Benzene Anhydride Heat Exchanger, 8-46
- Failure Analysis: Volatile Fatty Acid-Enhanced Carbon Dioxide Corrosion of a Multiphase Well Fluid Pipeline, 1-52
- New Remote Monitoring Link Takes to the Skies, 5-18
- Phorgotten Phenomena: Moderate Cathodic Protection: A Remedy Against Flowline Failure, 3-16
- Pipeline Integrity Assessment and Management, 1-18
- Stray Current Testing on Gas Distribution Piping Following Start-up of a New Light Rail Transit Line, 6-22

PITTING ATTACK

See MICROBIAL ATTACK

POWER PLANTS

- Case History: Designing Cathodic Protection for Power Plant Applications, 11-18

- Phorgotten Phenomena: Writing and Enforcing Specifications—An Incident with a Power Distribution Transformer, 9-30
- Stress Corrosion Cracking of Carbon Steel in Nuclear Component Cooling Water Systems—Part 1, 5-52
- Stress Corrosion Cracking of Carbon Steel in Nuclear Component Cooling Water Systems—Part 2, 6-46

REBAR

See CONCRETE

REFINERIES

See also OIL AND GAS PRODUCTION

- Case Histories: Fiberglass-Reinforced Plastic Equipment for Waste Incineration Gases, 4-50
- CDU Overhead Corrosion: A NACE Solution, 4-16
- Comparison of Reactive and Refractory Metals in Selected Aqueous Environments, 4-46
- Corrosiveness of Acidic Crude Oil and Its Fractions, 4-34
- Failure Analysis of Piping in a Benzene Anhydride Heat Exchanger, 8-46
- Laboratory Evaluation of Corrosion Mitigation Strategies for Large, Once-Through Heat Exchangers, 9-36
- Stress Corrosion Cracking in Fuel Ethanol: A Recently Recognized Phenomenon, 12-50

SEAWATER

See also OFFSHORE STRUCTURES

- Case History: Corrosion Problems Associated with a Fireproofing-Coated Structure Exposed to a Marine Environment, 10-34
- Design of Cathodic Protection for the Kadikoy Pretreatment Plant Sea Outfall, Istanbul, Turkey, 10-26
- Corrosion Basics: Marine Corrosion, 10-54
- The Case for Composites, 8-16

STEELS, CARBON

- Stress Corrosion Cracking of Carbon Steel in Nuclear Component Cooling Water Systems—Part 1, 5-52
- Stress Corrosion Cracking of Carbon Steel in Nuclear Component Cooling Water Systems—Part 2, 6-46

STEELS, STAINLESS

- Corrosion Basics: Stainless Steels, 4-58
- Corrosion Monitoring of Type 304 Stainless Steel in a Black Liquor Evaporation Process, 7-34

- Phorgotten Phenomena: Localized Corrosion of Stainless Steel, 7-48
- Phorgotten Phenomena: Moderate Cathodic Protection: A Remedy Against Flowline Failure, 3-16

TANKS

- Anticorrosion Techniques for Aboveground Storage Tanks, 11-40
- Case Study: Premature Failure of Repainted Epoxy on the Internal Bottom Plate of a Fuel Oil Tank, 2-28
- Corrosion of Aboveground Fuel Storage Tanks, 9-44
- Electrochemical Noise Corrosion Monitoring in Radioactive Liquid Waste Storage Tanks, 2-52

WATER AND WASTE WATER

- A Sacrificial Anode Retrofit Program for Existing Cast Iron Distribution Water Mains, 5-20
- Case Histories: Ductile Iron Pipeline Failures, 5-26
- Case History: Cathodic Protection for a New Ductile Iron Water Transmission Main, 10-20
- Case History: Corrosion and Cathodic Protection of Prestressed Concrete Cylinder Pipe, 5-32
- Case History: Restoring a Sludge Holding Tank at a Wastewater Treatment Plant Using High-Performance Coatings, 11-32
- Evaluation of In Situ Pipe Coating Process for Mitigation of Lead and Copper in Drinking Water, 5-38
- Microbial Contribution to Blue Water Corrosion, 6-56
- Water Treatment Basics: Water Treatment Revisited: pH, 12-44

A searchable online index to MP articles and authors is available on the NACE Web site that goes back to 1962. Go to www.nace.org and click on the "Journals" link. From there access MPLit to search for articles by author, title, or key word.

MP MATERIALS
PERFORMANCE
CORROSION PREVENTION AND CONTROL WORLDWIDE

2005 MP Index

Author Index

- Abdel-Karim, R.**, 9-50
Aghajani, A., 12-22
Agrawal, A.K., 12-50
Ahmad, S., 12-56
Akkoyunlu, A., 10-26
Al-Hajri, M., 8-20
Almeraya-Calderón, F., 7-34
Al-Muaili, F., 8-50
Al-Rob, M.A., 12-56
Anfinson, K.A., 3-44
Ansuini, F.J., 9-22
Armon, R., 8-56
- Babakr, A.**, 12-56
Barnard, L.M., 1-30
Bayhan, H., 10-26
Beavers, J.A., 12-50
Beggs, J., 6-22
Bhat, S.S., 1-52
Bonds, R.W., 1-30
Borunda-Terrazas, A., 7-34
Brodsky, N., 4-34
Brongers, M.P., 12-50
Buecker, B., 2-42
- Chacón Nava, J.**, 7-34
Cizmecioglu, Z., 10-26
Cooper, S., 7-42, 10-40
Cormack, D.E., 4-26
Critchley, M., 6-56
- Delgado, S.**, 10-34
Demoz, A., 3-18
De Rincon, O., 10-34
Dimond, J.R., 9-22
Dunmire, D.J., 9-16
- Eden, D.A.**, 2-36
Eden, D.C., 2-35
Edgemon, G.L., 2-36
El-Raghy, S., 9-50
Enos, D.G., 8-36
Erturk, F., 10-26
Evangelista, J., 8-16
- Fernandez, R.**, 10-34
Fitzgerald, J.H., 4-20, 6-22
Freedman, A.J., 12-44
Friesen, W., 3-18
- Gaona-Tiburcio, C.**, 7-34
Garcia, D., 10-34
Ghazal, H., 9-50
Ginsberg, M., 10-40
Goldis, A., 4-34
Groisman, A., 4-34, 9-44, 11-40
Gummow, R.A., 5-32
- Hall, D.R.**, 2-48
Hinkebein, T.E., 9-36
Hock, V.F., 5-38, 7-42, 10-40
Hodgdon, A., 2-18
Hodgins, W., 8-30
Hollander, O., 5-48
Holmes, D., 4-46
- Holtsbaum, W.B.**, 6-26
Horton, A.M., 1-30
Huck, T., 11-18
Hunter, D.A., 11-24
- Imasogie, B.I.**, 8-36
Isor, A., 1-52
Ives, M.B., 7-20, 8-22
- Jacobson, G.A.**, 10-18, 12-18
Javaherdashti, R., 1-56, 11-46
Jiang, Q., 8-46
Jonas, O., 5-52, 6-46
- Kakoti, M.**, 1-52
Kane, R.D., 2-36, 12-50
Kelley, D.H., 4-50
Kirk, D.W., 4-26
Kirk, M., 6-38
Kish, J.R., 7-20, 8-22
Klein, L., 12-50
Kleinschmidt, J., 10-40
Klopper, D.J., 5-20
Kroon, D.H., 1-24
- Levin, B.L.**, 9-36
Levitsky, S., 8-56
Li, J.C., 8-46
Lory, E., 10-40
Lindemuth, D., 1-24
- Madzar, T.**, 1-44
Malik, A.U., 2-28, 8-50
Malone, P., 7-42
Mancini, J., 5-52, 6-46
Manian, L., 2-18
Marhamati, E.G., 1-56
Marsh, C., 7-42
Marshall, O.S., 5-38, 7-42
Martin, J.H., 3-38
Martinez-Villafane, A., 7-34
Maruthan, K., 12-30
McGhee, A., 5-52, 6-46
McInerney, M., 7-42
Megahed, M., 9-50
Miskovic, L., 1-44
Mobin, M., 2-18, 8-50
Monnapillai, N.A., 9-56
Moody, K.J., 6-30
Morefield, S., 7-42
Munro, I., 7-48
- Natesan, M.**, 12-30
Nieves Mendoza, D., 7-34
- O'Dea, V.**, 11-32
O'Halloran, R., 6-56
Oliver, G.L., 1-30
Olorunniwo, O.E., 8-36
Orozco-Carmona, V.M., 7-34
Oturkar, N., 9-30
Overmann, J.L., 5-38
- Peiwen, Q.**, 10-48
Penner, J., 4-34
Perdomo, J.J., 7-52
Pourbaix, A., 3-16
- Qui, J.H.**, 3-22
- Rajendran, P.**, 12-30
Rash, V., 10-20
Ratzker, M., 8-56
Rodda, J.R., 7-20, 8-22
Rogan, I., 1-44
Roy, R., 1-38
- Saatchi, A.**, 12-22
Sadaba, M., 10-34
Sampson, S., 1-24
Sanchez, En., 10-34
Sanchez, Er., 10-34
Sanchez, M., 10-34
Sarkar, A.G., 1-52
Savchenko, N., 4-34
Schmid, R., 12-36
Schramuk, J., 5-20, 10-20
Selvaraj, M., 12-30
Smestad, D., 11-24
Smith, L., 3-16
Smothers, K.W., 5-38
Song, F.M., 4-26
Spry, T.D., 7-52
Sridhar, N., 12-50
Starosvetsky, J., 8-56
Sun, X., 3-28
Szeliga, M.J., 5-26
- Tao, J.**, 10-48
Taylor, R., 6-56
Thompson, N.G., 9-16
Townsend, H.E., 11-28
Tuval, E., 8-56
- Valliappan, M.**, 4-40
VanBlaricum, V., 10-40
Veazey, M.V., 1-16, 2-16, 4-16, 5-16, 6-18, 7-16
Vestre, H.I., 3-44
Vignetti, A.M., 1-44
Vincent, L.D., 7-28
Vincenzo, T., 1-24
- Weiss, C. Jr.**, 7-42
Wong, D., 4-26
Wuertz, B.L., 1-44
- Yetilmezsy, K.**, 10-26
Yunovich, M., 9-16
- Zhengsu, T.**, 10-48
Zhao, M., 8-46